- (2) To the rear of all doors or windows designed to be open, except windows designed to be opened solely as emergency exits.
- (e) The exhaust system of every truck and truck tractor shall discharge to the atmosphere at a location to the rear of the cab or, if the exhaust projects above the cab, at a location near the rear of the cab.
- (f) No part of the exhaust system shall be temporarily repaired with wrap or patches.
- (g) No part of the exhaust system shall leak or discharge at a point forward of or directly below the driver/sleeper compartment. The exhaust outlet may discharge above the cab/sleeper roofline.
- (h) The exhaust system must be securely fastened to the vehicle.
- (i) Exhaust systems may use hangers which permit required movement due to expansion and contraction caused by heat of the exhaust and relative motion between engine and chassis of a vehicle.

[53 FR 49401, Dec. 7, 1988]

## §393.84 Floors.

The flooring in all motor vehicles shall be substantially constructed, free of unnecessary holes and openings, and shall be maintained so as to minimize the entrance of fumes, exhaust gases, or fire. Floors shall not be permeated with oil or other substances likely to cause injury to persons using the floor as a traction surface.

[53 FR 49401, Dec. 7, 1988]

## §393.85 [Reserved]

# §393.86 Rear end protection.

Every motor vehicle, except truck-tractors, pole trailers, and vehicles engaged in driveaway-towaway operations, the date of manufacture of which is subsequent to December 31, 1952, which is so constructed that the body or the chassis assembly if without a body has a clearance at the rear end of more than 30 inches from the ground when empty, shall be provided with bumpers or devices serving similar purposes which shall be so constructed and located that:

- (a) The clearance between the effective bottom of the bumpers or devices and the ground shall not exceed 30 inches with the vehicle empty;
- (b) The maximum distance between the closest points between bumpers, or devices, if more than one is used, shall not exceed 24 inches;
- (c) The maximum transverse distance from the widest part of the motor vehicle at the rear to the bumper or device shall not exceed 18 inches;
- (d) The bumpers or devices shall be located not more than 24 inches forward of the extreme rear of the vehicle; and
- (e) The bumpers or devices shall be substantially constructed and firmly attached. Motor vehicles constructed and maintained so that the body, chassis, or other parts of the vehicle afford the rear end protection contemplated shall be deemed to be in compliance with this section.

#### §393.87 Flags on projecting loads.

Any motor vehicle having a load or vehicle component which extends beyond the sides more than 4 inches or more than 4 feet beyond the rear shall have the extremities of the load marked with a red flag, not less than 12 inches square, at each point where a lamp is required by Table 1, § 393.11.

[53 FR 49401, Dec. 7, 1988]

# §393.88 Television receivers.

Any motor vehicle equipped with a television viewer, screen or other means of visually receiving a television broadcast shall have the viewer or screen located in the motor vehicle at a point to the rear of the back of the driver's seat if such viewer or screen is in the same compartment as the driver and the viewer or screen shall be so located as not to be visible to the driver, while he/she is driving the motor vehicle. The operating controls for the television receiver shall be so located that the driver cannot operate them without leaving the driver's seat.

# § 393.89 Buses, driveshaft protection.

Any driveshaft extending lengthways under the floor of the passenger compartment of a bus shall be protected by means of at least one guard or bracket